LCD Drawer User Manual

This manual, covering various aspects of the equipment such as installation, setup and cascade, will help you make full use of this LCD KVM Drawer. Please read this manual carefully and install and operate the equipment according to the manual to avoid damage to this product its accessories.

Product package includes following items:
1 * 15.6" LCD KVM Drawer;
1 * AC Power Cord
1 * Rack installation bracket (one pair)
1 * CD （USER'S manual）
Please check items above. If any item is missing or damaged, please contact your dealer promptly.

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BRIEF INTRODUCTION

KVM-1508WS/KVM-1516WS LCD KVM console control panel integrates keyboard, Widescreen LCD display and touch pad in a drawer type worktable and provides a convenient space-saving operation mode for KVM switch technology. The cover is an widescreen LCD display, while the base is keyboard and touchpad. buckles on the left and right are moved aside to open the cover. It can be operated once the KVM module is pulled out. Once the operation is completed, push the KVM module back to the rack.

KVM-1508WS/KVM-1516WS console is a control device integrating 15.6” LCD, 86-key keyboard, touchpad mouse and 8-port or 16-port mixed connection KVM. You can access multiple hosts using the LCD console while saving money and efforts.

A single KVM-1508WS/KVM-1516WS LCD KVM can control up to 8 hosts, or up to 16 hosts. In addition, both have independent cascade connection port, so KVM-1508WS consoles can be connected in series to control 512 hosts, and KVM-1516WS consoles can be connected in series to control 2048 hosts. Since LCD KVM series supports hosts of both PS/2 and USB port, KVM cable of PS/2 or USB connector can be selected for hosts depending on cables connecting the switcher and host.

Major features include OSD menu, password security mechanism, hotkey control and auto-scanning. Keyboard and mouse simulation can boot computers at the same time. All hosts connected can be accessed conveniently via OSD (On Screen Display) activated by keyboard or through hotkey combination input. The auto-scanning feature can automatically scan and monitor operation status of each host connected. It is simple and convenient to install the LCD KVM, just inserting cables to corresponding ports. No installation disk or complicated installation program is needed, and no compatibility problem exists.

LCD KVM series is the best choice to save time and efforts. Since all hosts can be controlled from a single main control terminal, using the LCD KVM console: (1) avoids the cost of keyboard, mouse and monitor of each host; (2) saves work space; (3) saves power; (4) saves the trouble of moving from one computer to another.

* For Mac and Sun hosts, USB cable must be used for connection. *

FEATURES

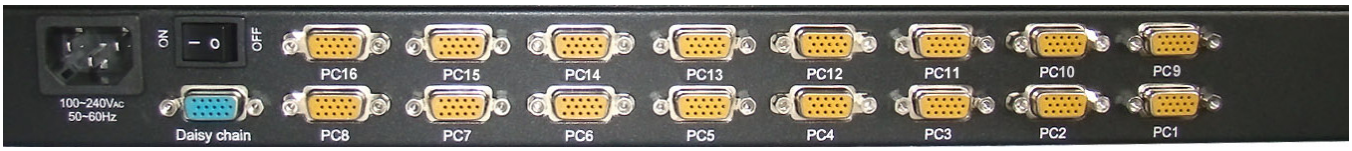
- The console with 15.6” LCD display is integrated to a drawer type worktable of 1U height to facilitate rack installation.
- Support combo (PS/2 & USB) interface for connecting to computer ports conveniently
- Support MS windows, Netware, Unix, and Linux
- Support iMAC, Power MAC and Sun Micro Systems with USB connection.
- No Software Required --- easy computer selection via On Screen Display (OSD) Menu, Push Buttons, and Hotkeys
- Provide various Hotkey (Scroll-Lock/ Cap-Lock/ Num-Lock/ L-Alt/ L-Ctrl/ L-Win/ R-Alt/ R-Ctrl/ R-Win) for switching computer port and other control functions, so Hotkey function can be used in various types of keyboards, and to avoid Hotkey duplicate problem.
- Provide ACL (Access Control List) security function. Store up to 8 independent user accounts
- Hot Plug --- add or remove connected computers without powering off the LCD Drawer
- Support two user layers, and search computer/server name
- Keyboard status restored when switching computer
- Support Daisy chain(8-layer) & Cascade(2-layer) function

SPECIFICATIONS

Feature	Specification
PC Type	Combo (PS/2 & USB Connector Support)
PC Port Connector	HDB15
PC Ports	8 / 16
Max Distance (LCD Drawer to PC)	16 feet (5m)
LCD Resolution	15.6 ” LCD : 1366 * 768
Daisy Chaining	Support Daisy chain(8 - layer) & Cascade(2 - layer) function
Computer port selection	On Screen Display (OSD) Menu, Hot Key, Push Button
Hotkey	Provide various Hotkey (Scroll-Lock/ Cap-Lock/ Num-Lock/ Alt/ Ctrl/ Win
LEDs	Power on & Selection
Security	Provide ACL(Access control List) security function, store up 8 independent controllable computers list
Multilingual OSD (on screen display) control	8 Languages (English, German, Spanish, Italian, Russian, Japanese, Simplified Chinese, France)
Auto-scan intervals	5 ~ 99 Sec
Keyboard Emulation	PS/2 or USB
Mouse Emulation	PS/2 or USB
Max. PC connection	>1024
Housing	Metal
Operation Temperature	0 ~ 50℃
Storage Temperature	-20 ~ 60℃
Humidity	0 ~ 95%, Non-Condensing
Mechanical	19” Rack mount,1U
Dimension(W x H x D)	446.4 x 44 x 406.4 (mm)

LCD Drawer Front VIEW

8 port LCD Drawer Rear VIEW



16 port LCD Drawer Rear VIEW

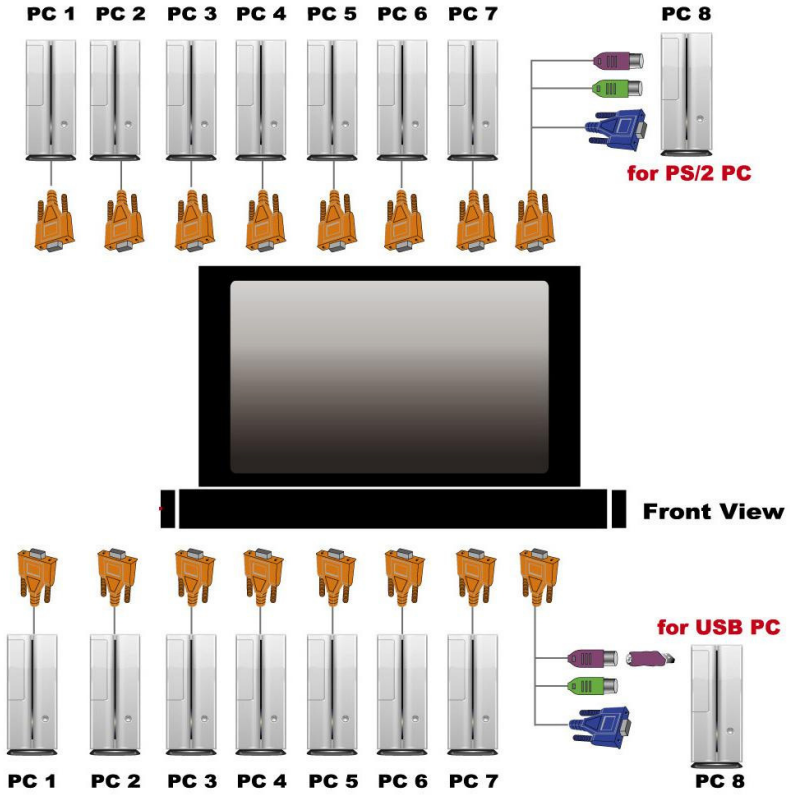


Diagram (16 port LCD Drawer)

INSTALLATION

On the back of the KVM Switch, each of the 8 / 16 PC ports has a HDB15 type connector. Each cable that comes with the Switch has a 3-in-1 connector at one end and a single HDB15 male connector at the other end. Plug the single connector end of the cable into the KVM PC port, and then plug the other end of cable to a PC VGA port.

Figure 1. 3-in-1 DB15 PS2 cable

(a) PS/2 computer --- Plug in the PS/2 mouse connector to the computer mouse port, then the PS/2 keyboard connector to computer keyboard port.

Figure 2. 2-in-1 DB15 USB Cable

(b) . USB computer --- Plug in the USB connector to the computer USB port, This single USB port can handle both keyboard and mouse data.

Daisy Chain Connection

Use one end of daisy chain cable to connect to the **Daisy Chain port** of Master KVM switch and connect the other end of daisy chain cable to the **Local Console port** of the next Slave KVM switch. Please repeat the connection procedures for next Slave KVM switch. You can daisy chain up to eight banks in maximum.

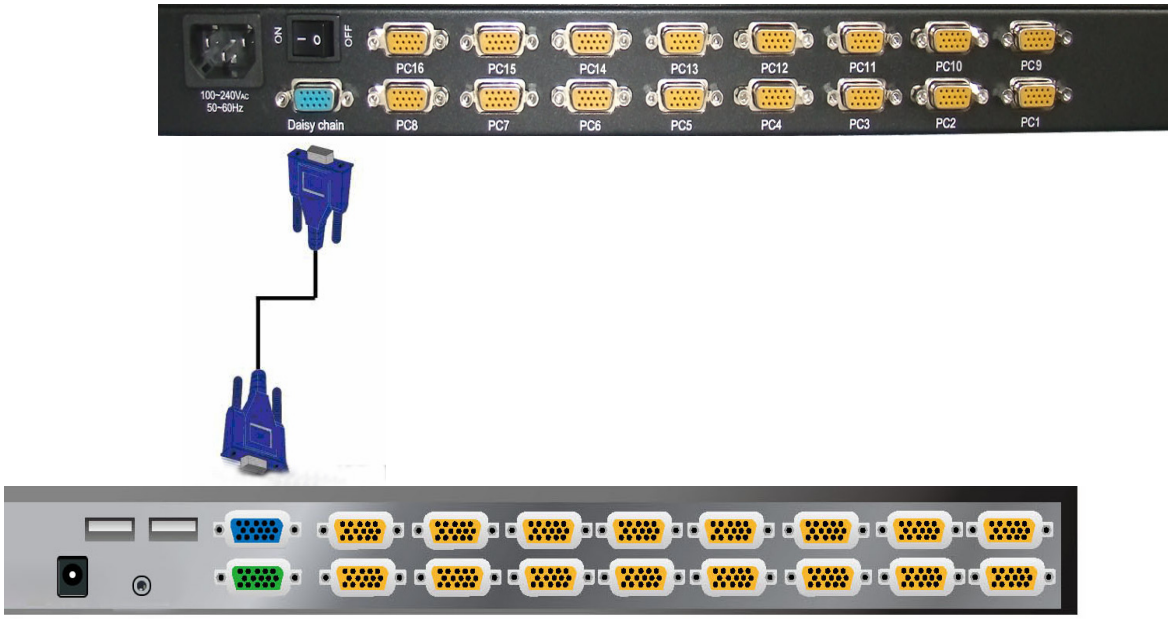


Figure 5. Daisy Chain Connection

The console OSD menu will show only the port information of the master KVM switch. When the master unit starts up, it will query all daisy chained Slave units, and automatically set up the Bank ID for each Slave unit. So the 7-seg LED on the Master unit will display 1, Slave 1 will display 2, Slave 2 will display 3, and so on. If not so, please **reset** (press “BANK” and port button) the Master unit to update the Bank ID immediately. Hot Plug function is supported in daisy chain connection. The Master unit will auto-query the daisy chained Slaves every 30 seconds.

You can also cascade through computer port. This cascade can work with other brand of KVM switch, but you need to change the Hotkey of slave KVM switches so that the master and slave KVM switches do not use the same Hotkey.

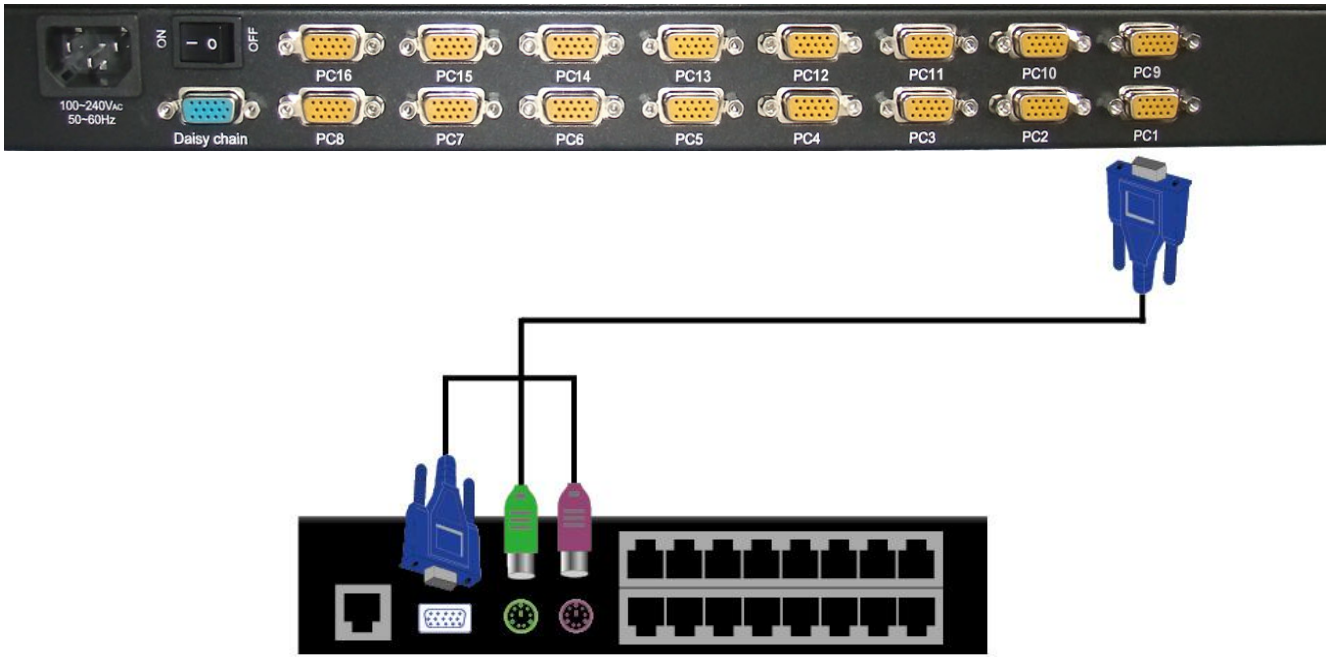


Figure 6. Cascade through Computer Port

Usage (Hotkey Commands and OSD Operations)

Buttons

The push Buttons 1 ~ 16 :

You can simply switch to a port by pressing the corresponding button. For 16 ports LCD Drawer, please press button 1 ~ 16 directly to select the port you want.

Hotkey

You can conveniently command LCD Drawer through a simple hot key sequence. To send commands to Drawer, you must **press the hotkey (**default **Caps Lock) twice within 2 seconds**. You will hear a beep sound confirming entering Hotkey mode. If you do not press any key during Hotkey mode over 2 seconds the Hotkey mode will be escaped and back to Normal state.

The default hotkey is **Caps Lock** but you can change hotkey as your application convenience. If you prefer to use other hotkey, please go to OSD menu and change the default hotkey to the other.

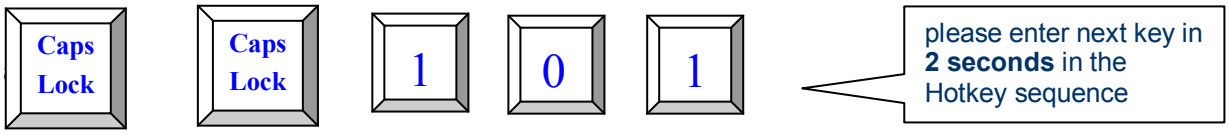
The table blow lists all supported hotkey commands.

The default hotkey starts from “Caps Lock”+“Caps Lock”, then the keys on the table list.

Command	Functio
Space bar	Brings up the OSD overlay screen
↑	Switches to the previous port
↓	Switches to following port
[1,2,..,8] bank, [01, 02,.,32] port	■ The first digit is the Switch bank number, starting with "1". The KVM switch on the daisy chain line is on bank 1 (the Master). A standalone KVM switch is also on bank 1. ■ The second & third digits are port numbers starting with " 01 "
Pg. Up	Switches to the previous bank
Pg. Dn	Switches to next bank
B	Turns the **beep sound** on/off
R	For SUPERVISORS that will set the OSD back to the factory default value (except the User Security
S	For SUPERVISORS that activates the **Auto-Scan** function
U **P**	For SUPERVISORS that turns the Security function on/off. **(**Default is off). Log out, that's only valid when the security is on.

Example #1 – To bring up the OSD overlay window, press **Caps Lock", "Caps Lock", and the "Space Bar"**. Immediately, the OSD overlay screen will appear. The superimposed menu screen is generated by the LCD Drawer, and does not affect your computers or software function in any way.

Example #2 – To switch to Bank 1 Port1, press **"Caps Lock", "Caps Lock", and "1", "0", "1".**



Actually there are two methods to bring up the OSD overlay window.

1. **Activate OSD by press Hotkey ---** press Hotkey twice then press Space bar.
2. **Activate OSD by Mouse ---**
   Press and hold the **left button** of the mouse and hit the **Esc** key to show the **Status** screen.
   Press and hold the **right button** of the mouse and hit the **Esc** key to bring up the Main Menu.

OSD (On Screen Display)

OSD Menu provides a menu-driven interface to control the LCD KVM switch.

This OSD Menu has four types of display screens:

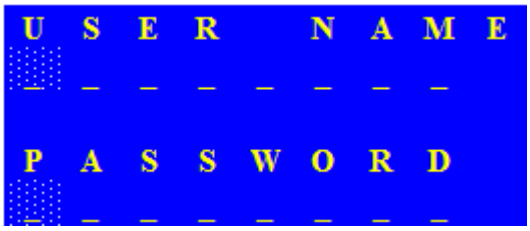
1. **Login Window** --- When powering on this LCD KVM switch, it will prompt a login window and ask for user name and password. This OSD function can setup one **SUPERVISOR** and eight **USERs**. **SUPERVISOR** can access to all OSD functions.
   USER can access to port name and port search only.
2. **Status screen** --- after the log in the Status screen will show up to display the current port settings and Hotkey type.
3. **Port Name** --- this menu displays port status, and you can switch to other port right here.
4. **Main Menu** --- there are eight menus to operate. They are listed as below:

MAIN MENU	Function
01 LANGUAGE	OSD language selection
02 PORT NAME EDIT	PORT NAME modification
03 PORT SEARCH	Quick searching by port name
04 USER SECURITY	Change password
05 ACCESS LIST	Define user access authority
06 HOTKEY	Change Hotkey
07 TIME SETTINGS	Modify auto-SCAN time interval
08 OSD MOUSE	Modify OSD MOUSE speed

Login Window

Power on the local console monitor, and power on the KVM Switch by plug in the power adapter. If the Security function is enabled (default is disabled), the Login window will show up waiting for user name and password.

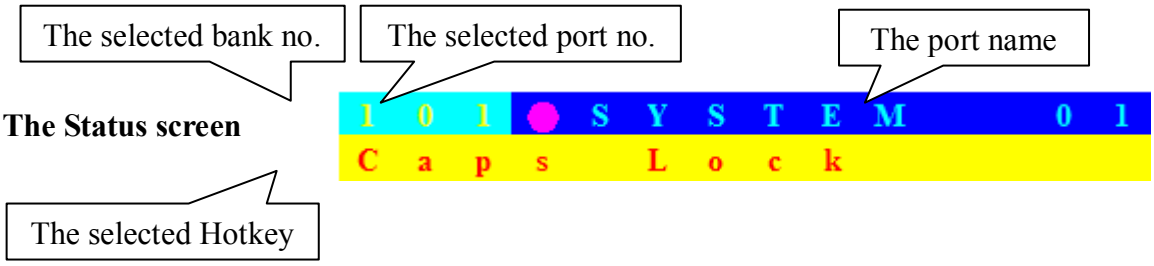
The Login window



The default is SUPERVISOR and default user name is eight zeros “00000000”.
The default password is eight zeros “00000000”.
There are case-insensitive, while OSD display fixed in upper case.

After login or port switch by panel button, OSD or Hotkey, the Status screen will show up to display the information of current settings -- one digit BANK NUMBER, two-digit PORT NUMBER, PORT NAME, and current Hotkey settings. Pressing any key or moving mouse will let the Status screen disappeared.

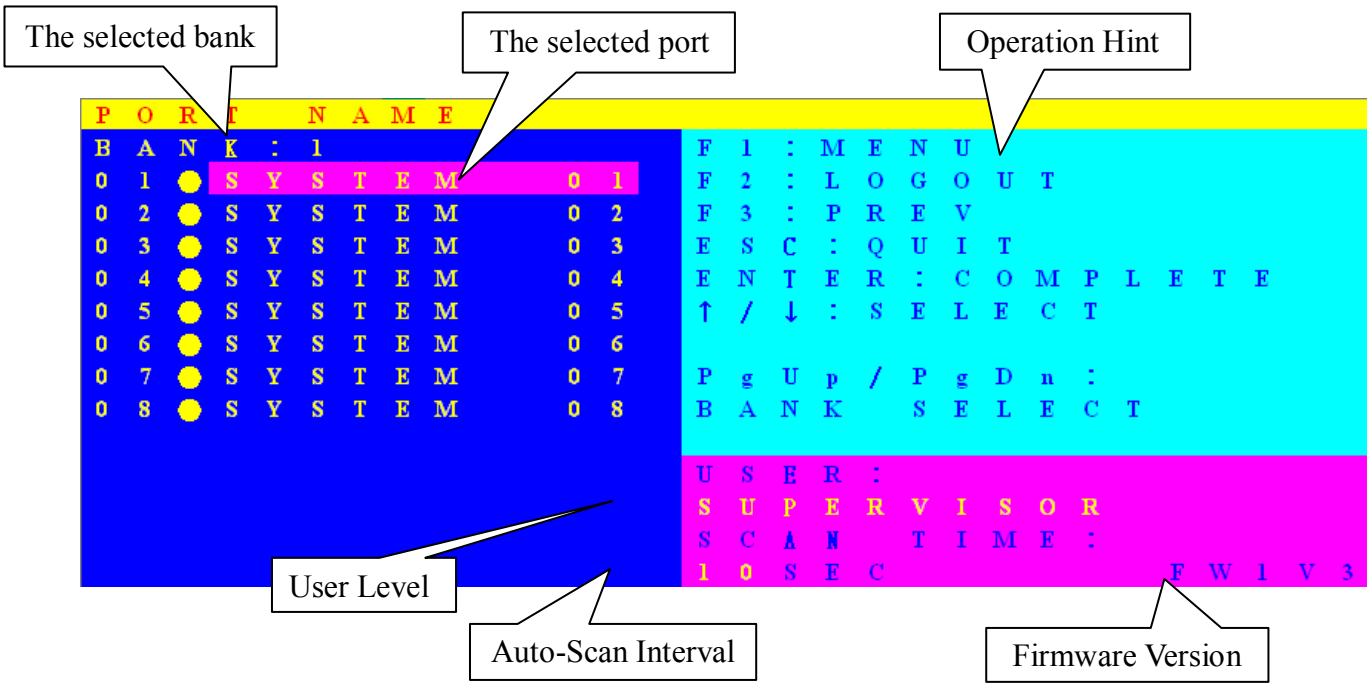
The Status screen



Auto-LOGOUT function

- In Login window, if no input for username and password over 1 minute, the screen will disappear. Hit any key to bring up the Login window again.
- At normal operation, if no input from the console keyboard or mouse over 10 minutes the LCD KVM switch will turn off the screen display and show up Login window asking for user name and password. One more minute of keyboard/mouse inactivity, the monitor will be turned off

➢ The first page shows the current port name and the selected port, and the operation hint.

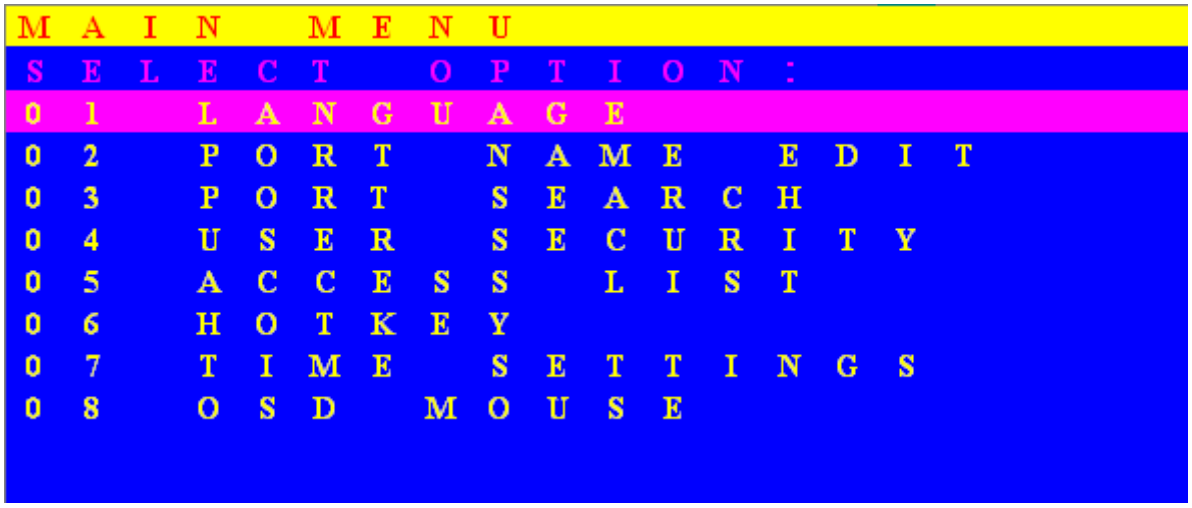


OSD Function Key	Description
F1	Go to the Main Menu
F2	To log out the OSD. If Security is enabled it will show up the Login window waiting for username and password. If Security is disabled it will show up the Status window
F3	Previous Menu
Enter	Switch to the selected port
↑ / ↓	Select the port (press Enter to switch)
PgUp	Previous Bank
PgDn	Next Bank
Esc	Exit
1	Show ports 01 ~ 08
2	Show ports 09 ~ 16
3	Show ports 17 ~ 24
4	Show ports 25 ~ 32

- **USER** --- There are two types of user levels: **SUPERVISOR** and **USER**. The default is **SUPERVISOR.** **SUPERVISOR** can setup and change the OSD settings at Main Menu. **USER** can only do the port switch and port search.
- **SCAN TIME** --- This is the time interval for auto-scan function. When auto-scan function is activated, the KVM switch will auto-scan the host port one by one in the interval as setting. Notice that the port without connecting to a computer/server will be skipped over on the scan.
- The numeric keypad is not supported, while in OSD screen, the arrow keys, PgUp, PgDn, and Enter keys are supported.

Main Menu

There are eight menus to choose from.

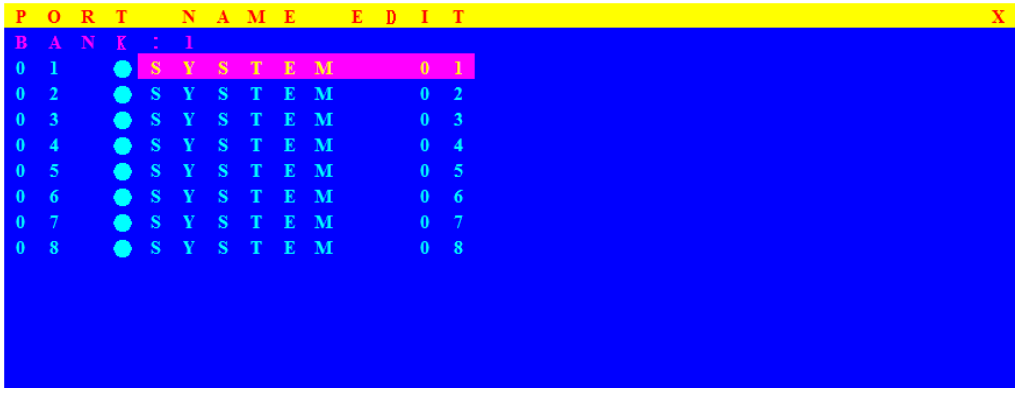


LANGUAGE

The OSD supports eight languages: English, French, German, Italian, Spanish, Simplified Chinese, Japanese, and Russian.

The default language is **ENGLISH**. Moving the cursor by keyboard (Up Arrow key "⬆"or the Down Arrow key "⬇") or mouse to select the language you like.

PORT NAME EDIT

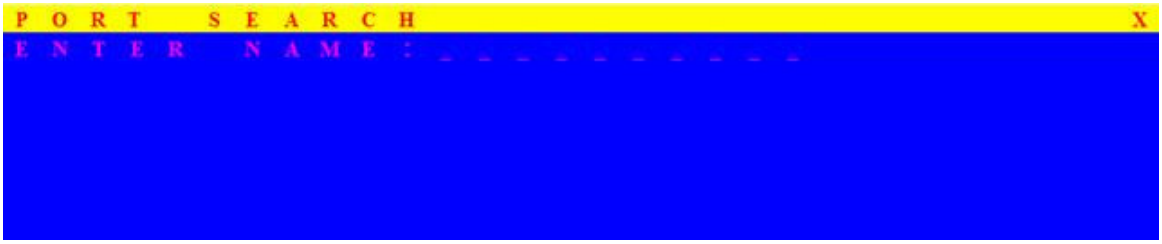


The first line bar is Bank number, following lines are port name list.

Use keyboard (Up Arrow key "⬆", Down Arrow key "⬇") or mouse to select the port. After select the port, you can either press the **Enter** Key, or move the cursor to port name and double click **left button** of mouse to switch the port immediately. Press **PgUp** key or **PgDn** key for selecting the previous or next Bank.

Press **Enter** key for editing port name. Press **Esc** key to cancel the editing without any change or press **Enter** key to complete the editing.

PORT SEARCH



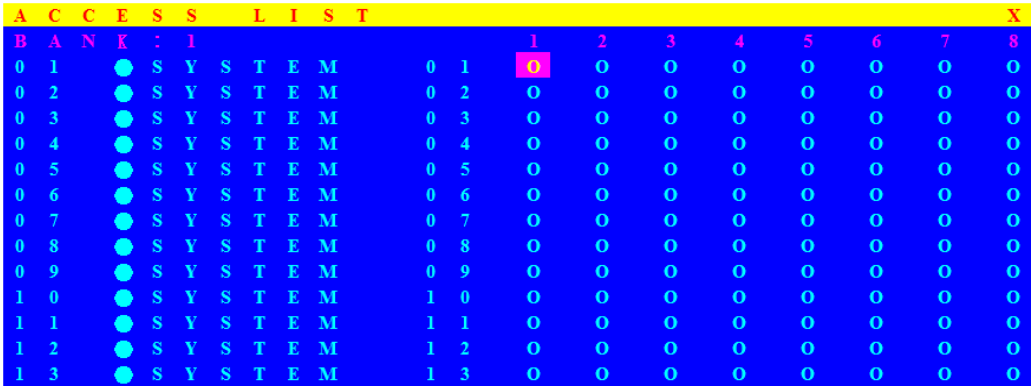
- Search the computer by port name. Enter "*" will show the all the port names.

USER SECURITY

There are two types of user levels: **SUPERVISOR** and **USER**. There is one SUPERVISOR and up to eight USERs can be configured.

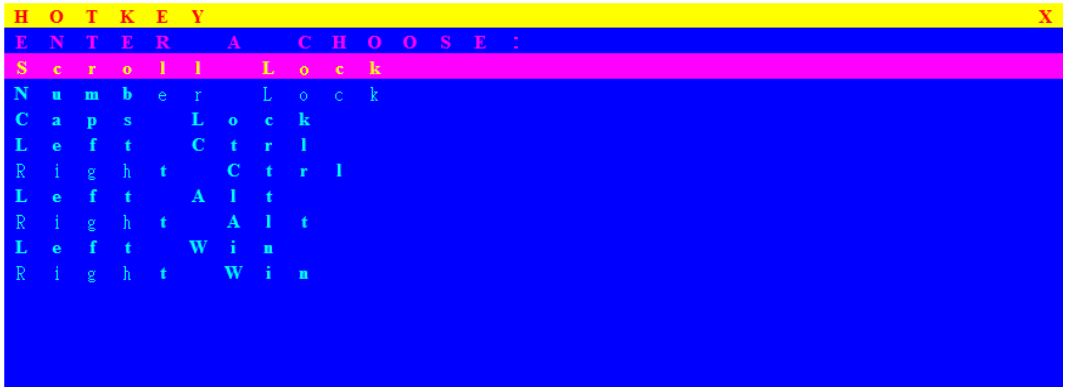
Press the **Enter** key or right button of mouse for editing. The left-top "S" means SUPERVISOR, and "1", "2", "3",…., "8" mean USERs. The maximum length of NAME and PASSWORD is eight characters (A~Z and 0~9).

ACCESS LIST


ACCESS LIST X
BANK : 1
1 2 3 4 5 6 7 8
01 SYSTEM 01 O O O O O O O O
02 SYSTEM 02 O O O O O O O O
03 SYSTEM 03 O O O O O O O O
04 SYSTEM 04 O O O O O O O O
05 SYSTEM 05 O O O O O O O O
06 SYSTEM 06 O O O O O O O O
07 SYSTEM 07 O O O O O O O O
08 SYSTEM 08 O O O O O O O O
09 SYSTEM 09 O O O O O O O O
10 SYSTEM 10 O O O O O O O O
11 SYSTEM 11 O O O O O O O O
12 SYSTEM 12 O O O O O O O O
13 SYSTEM 13 O O O O O O O O

Only SUPERVISOR can configure the ACCESS LIST. The first column is the port number, following the server/computer name list. The last 8 columns are the access right of each user. Use the **Enter** key or left button of mouse to active/deactivate the access right of each port. "**X**" means to disable access and "**O**" means to enable access.

HOTKEY



➢ Some keyboards may not equip with all the special keys. Making sure the key you select is available in you keyboard.

TIME SETTINGS

When the Auto-Scan function is activated, the LCD KVM switch will auto-scan the host ports one by one in the interval as setting. Notice that the port without connecting to a computer/server will be skipped over on the scan. The interval range is 5 ~ 99 seconds, and the default interval is 10 seconds. Press "**Enter**" key to save the SCAN TIME setting.

OSD MOUSE

You can change the moving speed of mouse cursor in this item. There are three levels to choose from.
The fastest moving speed is “FAST”, the second is “MIDDLE” and the slowest is “SLOW”.
Using "⬆" and "⬇" key on keyboard to move highlight bar to the wished speed. Press the **Enter** key to go into effect.

Certifications

FCC

This equipment has been tested and found to comply with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

(1) This device may not cause harmful interference

(2) This device must accept any interference received. Include interference that may cause undesired operation.

CE

This equipment is in compliance with the requirements of the following regulations: EN 55 022: CLASS B.

RoHS

All contents of this package, including products, packing materials and documentation comply with RoHS.

Trademarks:

All the companies, brand names, and product names referred to this manual are the trademarks or registered trademarks belonging to their respective companie